

REMARKS

Claims 1-15 are pending in this Application. By this Amendment, claim 1 is amended. The amendments to claim 1 introduce no new matter. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

Entry of the amendments is proper under 37 CFR §1.116 since the amendments: (a) place the application in condition for allowance for the reasons discussed below; (b) do not raise any new issue requiring further search and/or consideration as the amendments amplify issues previously discussed throughout prosecution; and (c) place the application in better form for Appeal, should an Appeal be necessary. The amendments are necessary and were not earlier presented because Applicants understood, based on the results of the July 11, 2005 telephone interview that the Examiner believed that not all of the features recited in the claims as they stood at that time were, in fact, suggested by the applied prior art references. Based on a new conclusion of the Examiner in this regard, as discussed below, the amendments are made in response to arguments raised in the Final Rejection. Entry of the amendments is thus respectfully requested.

The Office Action, in paragraph 3, repeats the rejection from the previous Office Action of claims 1-16 [sic] under 35 U.S.C. §103(a) as being unpatentable over what is alleged to be Applicants' admitted prior art, specifically Fig. 9, in view of U.S. Patent No. 4,398,162 to Nagai, and further in view of U.S. Patent No. 5,185,589 to Krishnaswamy et al. (hereinafter "Krishnaswamy")¹. This rejection is respectfully traversed.

The Office Action, in fact, refers Applicants to the previous Office Action for the "details of the rejection." The previous Office Actions asserted that the feature of a coplanar

¹ Claim 16 was canceled by the October 1, 2004 Amendment.

wave-guide structure for the top electrode of the FBAR is taught by Krishnaswamy, citing Fig. 3 and specifically elements 35 and 38. Applicants argued in a Request for Reconsideration, filed on August 5, 2005, that it is clear from the depictions in Krishnaswamy that the central signal line 35 and the two ground planes representing first and second conductive lines 38 comprise a bottom electrode of the FBAR. In other words, Applicants argued any purported coplanar wave-guide structure disclosed in Krishnaswamy is with regard to the bottom electrode of the FBAR rather than the top electrode, as is positively recited in independent claim 1.

In rebuttal of Applicants' arguments, this Office Action asserts that these arguments are not considered by the Examiner to be persuasive. The Office Action states in a conclusory manner, and with no other evidence in support of the conclusion, that one of ordinary skill art would recognize that the Krishnaswamy structure can be used for either a top or a bottom electrode of an FBAR.

Independent claim 1 recites, an electric filter comprising a plurality of thin film bulk acoustic resonators (FBARs) each comprising a thin layer of piezoelectric material sandwiched between a top electrode and a bottom electrode, the plurality of FBARs being linked in a series/parallel connection arrangement for which the areas of the electrodes in contact with the piezoelectric layer to form the resonators are different between in series and in parallel FBARs, wherein: all the FBARs are disposed on one substrate; the piezoelectric layer has a flat top surface; and the top electrode has a coplanar wave-guide structure by being disposed on the top surface of the piezoelectric layer together with two ground electrodes.

While Applicants do not concede the above conclusion of the Office Action regarding the interchangeability of the top and bottom electrode structures, particularly where no support for this conclusion is provided, the feature wherein the top electrode and two ground electrodes are disposed together on a flat top surface of the piezoelectric layer, as is positively

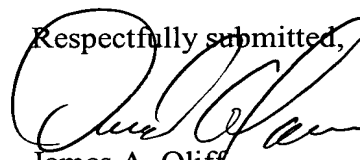
recited in independent claim 1, is neither taught, nor would it have been suggested, by Krishnaswamy, even in combination with the other applied references. Each of the dependent claims 2-15 recites separately patentable subject matter, but these claims also include all of the features recited in independent claim 1 from which they depend. Because the combination of the applied references does not suggest all of the features recited in independent claim 1, neither can this combination of references suggest all of the features recited in dependent claims 2-15.

Accordingly, reconsideration and withdrawal of the rejection of claims 1-15 under 35 U.S.C. §103(a) as being unpatentable over the combination of the applied references are respectfully requested.

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-15 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



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